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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,081	01/16/2002	Osamu Terasaki	TAKIT 162	6139

23599 7590 12/30/2003

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EXAMINER

SOUW, BERNARD E

ART UNIT	PAPER NUMBER
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2881

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

10/031,081

Applicant(s)

TERASAKI ET AL.

Examiner

Bernard E Souw

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MW

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 25 September 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☒ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none.Claim(s) objected to: none.Claim(s) rejected: 1-8.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.

10. ☒ Other: see attached
see 870-892

ADVISORY ACTION

1. The period for reply continues to run 4 MONTHS from the date of the final rejection. Any extension of time must be obtained by filing a petition under 37 CFR 1.136(a) accompanied by the appropriate fee. The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. A reply within the meaning of 37 CFR 1.113 or a request for a continued examination (RCE) in compliance with 37 CFR 1.114 must be timely filed to avoid abandonment of this application.

After-Final Response & Amendment

2. Applicant's Amendment filed September 25, 2003 (Paper No.11/B (NE)) under 37 CFR 1.116 in reply to the final rejection has been considered, but is not deemed to place the application in condition for allowance. Upon the filing of an appeal and entry of the amendment, the status of the claims would be as follows:

The rejected claim(s) are: 1-8

Supplemental Information

3. Applicant's supplemental information regarding the unique features of the invention, received by fax on 10/16/2003 comprising (a) an e-mail from the Inventor detailing the unique features (paper # 12/A), and (b) a copy of pg. 7 of the specification

(paper # 12/B), where the unique features are allegedly recited, have been fully considered, but they are not persuasive and therefore fail to place the application in condition for allowance.

(a) Regarding the Amendment B filed 09/12/2003 (Paper # 11B/NE)

Claim 1 is amended by adding some additional, supposedly unique features or steps, to the previously claimed method of determining a soft material structure by direct phase evaluation from the Fourier transforms (FT) of several high resolution electron micrographs (HREMs). However, these added new steps still do not sufficiently distinguish Applicant's method from the prior arts, as described in the following sections:

(a.1) The new added step of obtaining a 2-dimensional Fourier diffraction pattern from each high resolution electron micrograph (HREM) image (taken from various crystallographic directions), is inherent in Dorset's (TRIP 1996), because each HREM image is 2-dimensional, and therefore, the resulting Fourier diffraction pattern is also 2-dimensional, $F(h,k,0)$, as recited by Dorset in the Glossary on pg.213, column 2, ll. 8-9;

(a.2) the new limitation of making a distribution of diffraction intensities on the 3-dimensional reciprocal lattice points $F(h,k,l)$ from the 2-dimensional Fourier diffraction patterns (each taken from different crystallographic direction), and determining a unique space group (SC $\{h,k,l\}$) therefrom, is also inherent in Dorset's, as recited in the Glossary on pg.213, column 2, ll. 9-16;

(a.3) the new added step of obtaining an origin point of space coordinates on the basis of the determined space group, is also inherent in Dorset's, as recited in the Glossary on pg.213, column 2, ll. 19-30.

(b) Regarding the Supplemental Amendment faxed on 10/16/2003 (Paper # 12/C)

(b.1) Steps 1-2 are the same as step (a.1) recited above.

(b.2) Step 3 is the same as step (a.2) recited above. Even Applicant's assumption that the SC has a center of inversion (not recited in the specification!) is well known in the art, as recited by Dorset in the Glossary on pg.213, column 2, lines 11-13.

(b.3) Step 4 (again not recited in the specification!) is conventional in the art, since – unlike the FT diffraction pattern that usually has a symmetry, i.e., a center of inversion -- the inverse Fourier transform back into space coordinates does not normally have a symmetry and/or center of inversion, and therefore an origin must be chosen, and that origin must apriori be the same for all Fourier diffraction patterns, because they belong to the same crystal.

(b.4) Step 5 is the same as the rest of the limitations of claim 1, which has been rejected in the previous Office Actions, as specifically recited by Dorset in the Glossary on pg.213, column 2, lines 23-24.

CONCLUSION

4. For the reasons stated above, claims 1-8 are held prima facie obvious over the cited prior arts for reasons of record.

5. The period for reply continues to run 4 MONTHS from the date of the final rejection. Any extension of time must be obtained by filing a petition under 37 CFR 1.136(a) accompanied by the appropriate fee. The date on which the petition

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under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. A reply within the meaning of 37 CFR 1.113 or a request for a continued examination (RCE) in compliance with 37 CFR 1.114 must be timely filed to avoid abandonment of this application.

Communications


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 703 305 0149. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 703 308 4116. The central fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

bes

December 16, 2003


JOHN R. LEE
SUPERVISOR, PATENT EXAMINER
TECHNOLOGY CENTER 11